

AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in this application:

LISTING OF CLAIMS:

Claims 1 to 7. (Canceled).

8. (Currently Amended) A GMR sensor element, comprising:
eight GMR resistor elements arranged in a rotationally symmetrical positioning and connected to each other to form two Wheatstone full bridges, wherein the GMR resistor elements are structured in strip form and are oriented with respect to one another such that a line coplanar to the GMR sensor element, passing approximately through a center of a circle or octagon formed by the eight GMR resistor elements, and bisecting any of the GMR resistor elements is approximately perpendicular to a strip direction of the bisected GMR resistor element.

9. (Previously Presented) The GMR sensor element as recited in Claim 8, wherein the GMR resistor elements are interleaved.

10. (Canceled).

11. (Currently Amended) ~~The GMR sensor element as recited in Claim 8, A~~ GMR sensor element, comprising:

eight GMR resistor elements arranged in a rotationally symmetrical positioning and connected to each other to form two Wheatstone full bridges, wherein each GMR resistor element of the Wheatstone full bridges is subdivided into two equally constructed halves having directions, of the GMR resistor elements that are structured in strip form, that are orthogonal to each other.

12. (Previously Presented) The GMR sensor element as recited in Claim 8, wherein the GMR sensor element performs a determinate measurement of an angle of an outer magnetic field with respect to a magnetization of a reference layer over 360°.

13. (Previously Presented) The GMR sensor element as recited in Claim 8, wherein the GMR resistor elements are situated at least approximately in one of circular fashion and octagonally.

14. (Currently Amended) A method of using a GMR sensor element including eight GMR resistor elements arranged in a rotationally symmetrical positioning[,] ~~and~~ connected to each other to form two Wheatstone full bridges, structured in strip form and oriented with respect to one another such that a line coplanar to the GMR sensor element, passing approximately through a center of a circle or octagon formed by the eight GMR resistor elements, and bisecting any of the GMR resistor elements is approximately perpendicular to a strip direction of the bisected GMR resistor element, the method comprising one of:

using the GMR sensor element in an angle sensor for detecting an absolute position of one of:

one of a camshaft and a crankshaft in a motor vehicle in a camshaft free engine having one of electrical and electrohydraulic valve timing, a motor position of an electrically commutated motor, and of a windshield wiper position; and

using the GMR sensor element in a steering angle sensor system in a motor vehicle.

15. (Previously Presented) The GMR sensor element as recited in Claim 8, wherein the eight GMR resistor elements are arranged in a rotationally symmetrical positioning about a common center.

16. (Previously Presented) The GMR sensor element as recited in Claim 8, wherein the eight GMR resistor elements are circularly positioned.

17. (Previously Presented) The method as recited in Claim 14, wherein the eight GMR resistor elements are arranged in a rotationally symmetrical positioning about a common center.

18. (Previously Presented) The method as recited in Claim 14, wherein the eight GMR resistor elements are circularly positioned.

19. (New) The GMR sensor element as recited in Claim 8, wherein the eight GMR resistor elements have one reference magnetization direction each and one strip direction each, and the reference magnetization direction of each GMR resistor element is oriented at an angle of less than 45° to the respective strip direction.

20. (New) The method as recited in Claim 14, wherein the eight GMR resistor elements have one reference magnetization direction each and one strip direction each, and the reference magnetization direction of each GMR resistor element is oriented at an angle of less than 45° to the respective strip direction.